



Substitute Specification
(Marked-up Version)

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Description

MULTIPOLE, PERMANENT-MAGNET ROTOR FOR A ROTATING
ELECTRICAL MACHINE, AND A METHOD FOR PRODUCING SUCH A
ROTOR SAME

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CLAIM FOR PRIORITY

This application claims priority to International Application No. PCT/DE00/00853 which published in the German language on September 28, 2000.

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TECHNICAL FIELD OF THE INVENTION

The invention relates to the field of rotating electrical machines, and is applicable in particular, to the design configuration of rotor cores which are fitted with permanent magnets using what is referred to as a flux concentration construction.

BACKGROUND OF THE INVENTION

Special Now that special permanent magnets, referred to as hard ferrite, have been successfully developed i.e., which are matched to the stringent requirements of electrical machines, such magnets have now been used to an ever greater extent have been successfully developed. Such magnets are used to produce the rotating magnetic field in the rotating electrical machines. Various options for the arrangement of the permanent magnets in the rotor or in the stator have been developed for motors and generators with rated powers up to 30 kW at 3000 rpm. In this case, what is referred to as the "flux concentration construction" has been found to be the technically better solution above a rated power of several hundred watts. One embodiment of this construction is to arrange the permanent magnets in the pole gaps in the rotor (Siemens Journal 49, 1975, Issue 6, page 368 et seq./369, Figure 3). One known design solution for this purpose is to

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